

## Claims

- [c1] A method of clock recovery in a transition minimized differential scaling (TMDS) digital transmission system, where a TMDS receiver receives digital video data according to the received TMDS clock and a TMDS transmitter transmits digital video data according to a quartz clock and a dual port first-in-first-out (FIFO) memory is used to buffer digital video data during an active video period of a video line.
- [c2] A TMDS digital video data repeater, comprising:
- a dual port first-in-first-out FIFO memory buffer;
  - a TMDS receiver writing received data into a dual port FIFO memory buffer according to received TMDS clock;
  - a quartz oscillator;
  - one or several TMDS transmitters reading data from a dual port FIFO memory buffer according to the quartz clock;
  - a circuit to control an outgoing TMDS stream according to an incoming TMDS stream by counting the amount of received and transmitted data and using time of a data disable interval to compensate the speed difference of incoming and outgoing streams caused by a frequency difference between a quartz clock and received TMDS clock.
- [c3] A digital video data display system, comprising:
- a computer as a source of a digital video data;
  - a plurality of TMDS repeaters of claim 2 used to repeat and distribute a digital video data;
  - a plurality of digital display devices connected to TMDS repeaters of claim 2 and used to display a digital video data.